

What is claimed is:

1. A method for detecting binding of von Willebrand factor and glycoprotein Ib or inhibition of the binding, comprising the steps of:

5 immobilizing von Willebrand factor in a reaction vessel in the presence of a substance inducing the binding of von Willebrand factor and glycoprotein Ib, and,

10 reacting the immobilized von Willebrand factor with glycoprotein Ib.

2. The method according to Claim 1, wherein the substance that induces the binding of von Willebrand factor and glycoprotein Ib is botrocetin, ristocetin or the both substances.

3. The method according to Claim 1, wherein glyocalicin is measured by adding a sample containing glyocalicin to the reaction vessel during the reaction of von Willebrand factor and glycoprotein Ib, or prior to the reaction, and detecting inhibition of the binding of von Willebrand factor and glycoprotein Ib.

25 4. The method according to Claim 1, wherein a substance that inhibits the binding of von Willebrand factor and glycoprotein Ib is detected by adding a

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sample containing a substance to be detected to the reaction vessel during the reaction of von Willebrand factor and glycoprotein Ib, or prior to the reaction, and detecting inhibition of the binding of von
5 Willebrand factor and glycoprotein Ib.

5. A method for detecting binding of von Willebrand factor and glycoprotein Ib or inhibition of the binding, comprising the steps of:

10 binding a chimeric protein that consists of an Fc region of immunoglobulin molecule fused at its amino terminus to a partial protein comprising a von Willebrand factor binding site of glycoprotein Iba chain at its carboxyl terminus or the chimeric protein labeled
15 with a labeling substance to von Willebrand factor immobilized in a reaction vessel, and

detecting the Fc region of the immunoglobulin molecule or the labeling substance.

20 6. The method according to Claim 5, wherein, when the chimeric protein is allowed to bind to von Willebrand factor, or prior to the binding, a substance that induces the binding of von Willebrand factor and glycoprotein Ib is added to the reaction vessel.

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7. The method according to Claim 6, wherein the substance that induces the binding of von Willebrand

factor and glycoprotein Ib is botrocetin, ristocetin or the both substances.

8. The method according to Claim 6, wherein von
5 Willebrand factor is immobilized in the reaction vessel in the presence of a substance that induces the binding of von Willebrand factor and glycoprotein Ib.

9. The method according to Claim 5, wherein
10 glyocalicin is measured by adding a sample containing glyocalicin to the reaction vessel when the chimeric protein is allowed to bind to von Willebrand factor, or prior to the binding, and detecting inhibition of the binding of von Willebrand factor and the chimeric
15 protein.

10. The method according to Claim 5, wherein a substance that inhibits the binding of von Willebrand factor and glycoprotein Ib is detected by adding a
20 sample containing a substance to be detected to the reaction vessel when the chimeric protein is allowed to bind to von Willebrand factor, or prior to the binding, and detecting inhibition of the binding of von Willebrand factor and the chimeric protein.

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11. A method for detecting binding of von Willebrand factor and glycoprotein Ib or inhibition of

the binding, comprising the steps of:

immobilizing a chimeric protein that consists of
an Fc region of immunoglobulin molecule fused at its
amino terminus to a partial protein comprising a von
5 Willebrand factor binding site of glycoprotein Iba chain
at its carboxyl terminus in a reaction vessel,

binding von Willebrand factor or labeled von
Willebrand factor to the chimeric protein, and

10 detecting bound von Willebrand factor or the
labeling substance.

12. The method according to Claim 11, wherein,
when the chimeric protein is allowed to bind to von
Willebrand factor, or prior to the binding, a substance
15 that induces the binding of von Willebrand factor and
glycoprotein Ib is added to the reaction vessel.

13. The method according to Claim 12, wherein
the substance that induces the binding of von Willebrand
20 factor and glycoprotein Ib is botrocetin, ristocetin or
the both substances.

14. The method according to Claim 12, wherein
glycocalicin is measured by adding a sample containing
25 glycocalicin to the reaction vessel when von Willebrand
factor is allowed to bind to the chimeric protein, or
prior to the binding, and detecting inhibition of the

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binding of von Willebrand factor and the chimeric protein.

15. The method according to Claim 12, wherein a
5 substance that inhibits the binding of von Willebrand factor and glycoprotein Ib is detected by adding a sample containing a substance to be detected to the reaction vessel when von Willebrand factor is allowed to bind to the chimeric protein, or prior to the binding,
10 and detecting inhibition of the binding of von Willebrand factor and glycoprotein Ib.

16. A chimeric protein, which consists of an Fc region of immunoglobulin molecule fused at its amino
15 terminus to a partial protein comprising a von Willebrand factor binding site of glycoprotein Iba chain at its carboxyl terminus.

17. The chimeric protein according to Claim 16,
20 wherein the immunoglobulin molecule is derived from mouse.

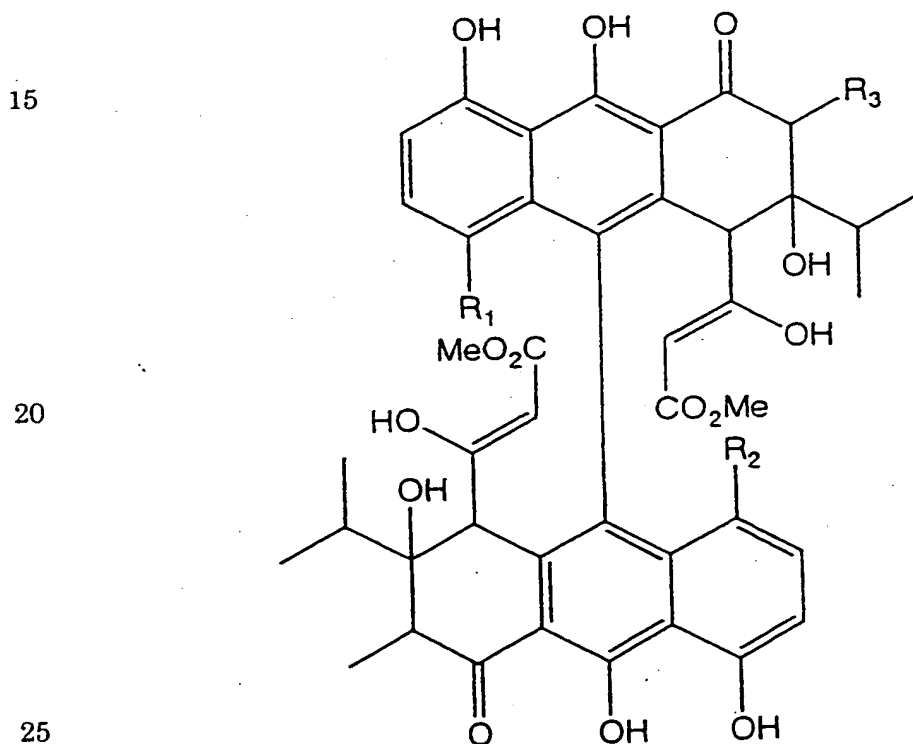
18. A kit for measuring glyco-calicin based on inhibition of a reaction of von Willebrand factor and
25 glycoprotein Ib, comprising von Willebrand factor and a chimeric protein that consists of an Fc region of immunoglobulin molecule fused at its amino terminus to a

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partial protein comprising a von Willebrand factor binding site of glycoprotein Iba chain at its carboxyl terminus.

5 19. A compound which is detected by the method according to any one of Claims 1, 5 and 12, which has an activity for specifically inhibiting platelet aggregation involving glycoprotein Ib and von Willebrand factor in blood plasma and a molecular weight of not
10 more than 2000.

20. The compound according to Claim 19, which has a structure represented by the following formula:



wherein R¹ and R² independently represent H or Cl, and R³ represents CH₃ or H.